Brave – Door Intercom

Brave Smyle - C
Brave Smyle - LC
Brave Smyle - C/C

User guide
Version 2.2

Dear customer

Congratulation to your purchase of "BRAVE SMYLE door intercom". The BRAVE Smyle door intercom is designed as universal project to be suitable for different installation on the field and brings more features and possibilities.

This manual is designed for Urmet 1129 panel in 4 models with 1 or 2 buttons:

Brave Smyle - C   - Comfort model
Brave Smyle - C/C - Comfort model with analog camera
Brave Smyle - LC   - Low cost model

Basic features of BRAVE door intercoms

- SMYLE solution – surface installation only
- IP 44 casing protection
- LED cards lighting
- Integrated analog color camera **(C/C, LC/C)**
- 1 (2*) relay with 8 different operational modes
- possibility to use electrical lock PSU for feeding the unit **(C)**
- elektronical loudness settings (without neccessity open the unit)
- adjustable tones detection for REDIAL or Hanging Up
- integrated RTC (realtimeclock) circuit – automatical DAY/NIGHT switching **(C)**
- programming by phone DTMF or by USB cable from PC**
- 24 digits length of number including ***** # Flash and Pause

    (C/C, LC/C) – models only
 * Comfort version only
 ** USB cabel is an option

Content

1 BASIC DESCRIPTION

1.1 Features

- ➢ Voice communication is powered from telephone line only
- ➢ Tone (DTMF) and pulse dial
- ➢ Two 24digit numbers with each button (including *, #, Flash and Pause)
- ➢ DAY/NIGHT switching by DTMF code or automatically by integrated real time clocks - RTC, weekly schedule **(C model)**
- ➢ Possibility of the call extension by * or # choice
- ➢ Possibility to connect 1 or 2 **(only C)** independent locks for door opening
- ➢ 8 different relays modes (for example: additional ring, progressive opening)
- ➢ Two codes for hanging up the unit by telephone
- ➢ Two codes for door opening by telephone for 1 pulse and two codes for 2 pulses
- ➢ 3 x 6 codes for each relay (code by buttons at doors)
- ➢ Can be connected electrically secure lock on the first switch (serial activation code)
- ➢ Possible switched on hang up by press the same push button
- ➢ Possible switched on mode "Baby Call"
- ➢ Possible switched on suppress receive DTMF by microphone
- ➢ Possible switched on accoustic tick to the conversation for speech recognition
- ➢ Possible switched on accoustic signalization of close the relay
- ➢ Adjustable number of rings before pick up an incoming call
- ➢ Adjustable parameters of tone dial, length of Flash and Pause
- ➢ Adjustable parametres of acoustical signalization
- ➢ Adjustable parametres of tones detector
- ➢ Elektronical loudness settings (without neccessity open the unit)
- ➢ Integrated analog colour camera with permanent or automatical operation **/C**
- ➢ Automatical camera lighting infra LED **/C**
- ➢ Possibility of powering by external PSU 12V (Siemens) **/C (C)**
- ➢ Easy settings of HW by DIP switch
- ➢ Factory settings (default) in different levels
- ➢ Programming by phone DTMF or by USB cable from PC
- ➢ Integrated heating for PCB
- ➢ Permanent cards lighting, switchable
- ➢ Ground output for better protection against static electricity

(C) – comfort model only (**Comfort**)
/C - model with camera only

1.2 Terminology

Telephone line   analog (2 wires) is way of connection to public network (**PSTN line**) or connection to PABX – telephone exchange at place of installation (**extension line**)

Line picking up   begin of call – same like OFF HOOK by handset

Line hanging up   end of call – same like ON HOOK by handset

Dial   **DTMF** - tone dial. It is dial by 2 tones combination (dial also special character * and #. Use Flash loop interruption)

    Pulse – dial by loop interruption (dial numbers only)

Incoming call   connection between intercom and phone has been done by dial from phone.The intercom picks up the call after preprogrammed number of rings. After picking up and password inserting you can programm the unit by phone.

Outgoing call   connection between intercom and phone has been done by dial from intercom, for example : by button pressing

Call establishing   it is stage when call is picked up by called party. This stage is not signalled at analog line. It just stop ringing tone and call starts. It is difficult identify just this moment.

El.lock code   function for relay closing by dial digits combination from intercom buttons

Code relay   between Doorphone Brave and the electric lock can be connected code relay (**COSW** - CodeSwitch), which is located at the lock and lock activates only when is the same the specified serial combination of the Brave and set the code on the board relay (COSW).

External code   Digits combination dial from intercom buttons for relay activation. External = dial by intercom buttons – out of building (at place of door intercom installation)

Internal code   Digits combination dial from phone for relay activation (DTMF). Internal = dial by phone – inside building (phone connected to other PBX extension)

⚠️

The manufacturer continuously improves the product firmware. The technology used allows you to upload to Brave the latest version of the firmware any time using a standard computer with BraveSet and USB cable. The latest version of the firmware is available at
http://www.alphatech.cz

1.3   Different Models of Smyle Brave door intercom

Brave door intercoms is designed as new generation of door intercom units reflects all experiences collected during last 10 years of succesfull sales of door enry solutions. Features and parametres are different for different models of intercom to provide best balance between price and usage value.

In this manual you will meet features and parametres marked by **(C)** which are specific for Brave Smyle (**Comfort**) model only and features and parametres marked (**M**) which are planned for **modular** model (in Smyle solution are not provided due mechanical solution)

Labelling of availability function :

Model **LC** (low cost) has all features except particularly marked

Model **/C** is version equiped by full colour analog camera

Model **C** (comfort) has special features marked by **(C)**

Model **M** (modular) has marked **(M)** – in mechanical Smyle solution is not produced! And it is mentioned in programming tables only which are same for all models.

1.4 Models of Brave door intercom

SMYLE models of Brave LC/C includes appropriate mother board with all connectable elements.
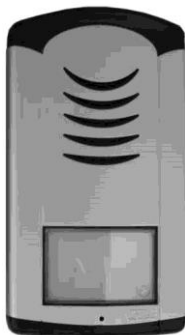
Brave Smyle - 01C   Brave Smyle - 01C/C
Brave Smyle - 01LC
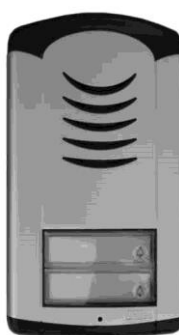
Brave Smyle – 02C   Brave Smyle – 2C/C
Brave Smyle – 02LC

Models L**C** and **C** are different up mother board components. In model **(LC)** is missing:

- Second relay
- RTC real time clocks for automatic DAY/NIGHT switching

Models with camera **/C** have added:

- Possibility of external powering (usable for relay modes 7 and 8)
- automatical / permanent lighting for camera (infra)
- switch off cards lighting
- disconnectable internal impedance for camera cable ending 75ohm

1.5 PCB Schematics

All functional and connectional elements are marked by red rounded number at bellow picture. Explanation follow on next page.
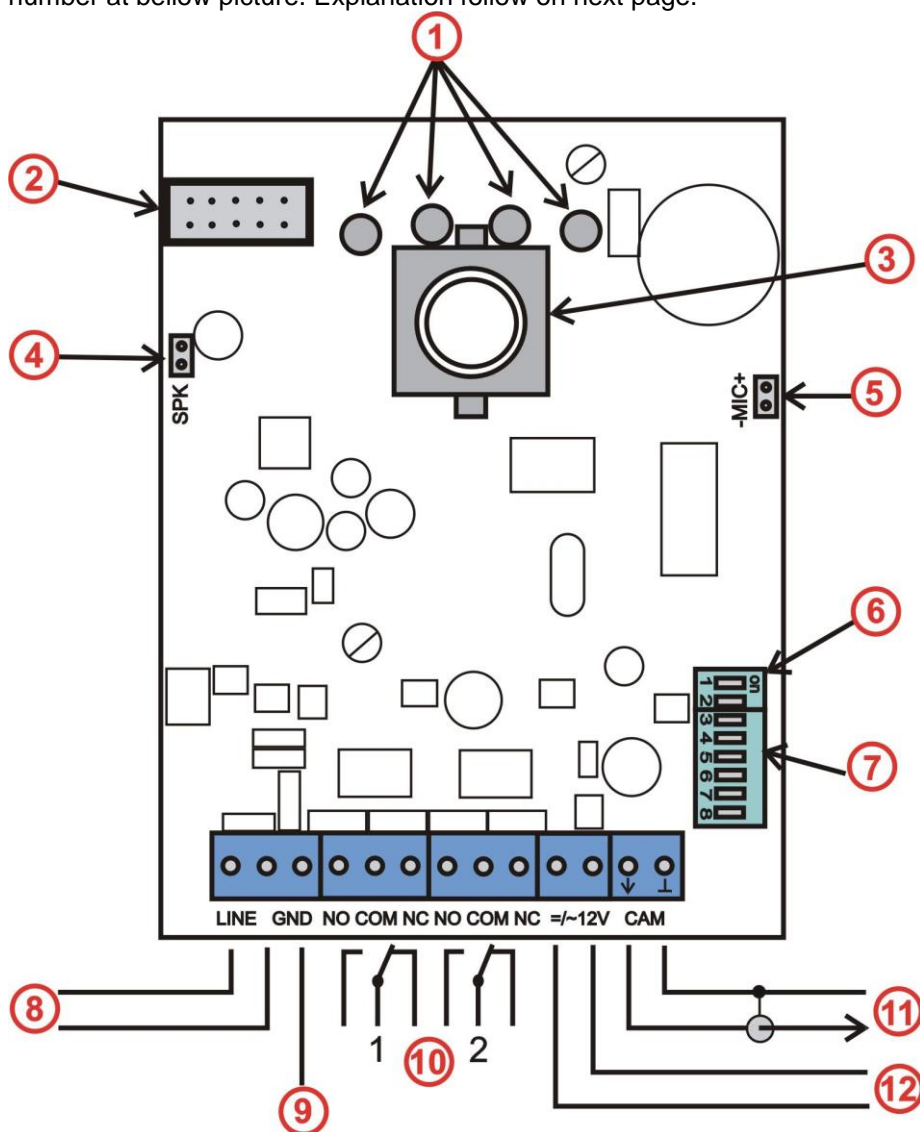
Pict. 1   Brave Smyle mother board

(1) + (3) + (7) + (11) - version /C only
relay 2 version (C) only

1. Camera lighting - infra LED. It lights up space before camera when is active. It is possible switch off (via. item 7) – ***version for camera only /C***
2. Connector to PC connection via USB cable
3. Analog colour camera – ***version with camera /C only***
4. Speaker connection
5. Microphone connection (caution on polarity)
6. DIP switch in all models:
   1 = Service, usage – when programming password is forgotton. Incoming call is going directly to programming mode where you can set new password.

   2 = Heating – switch ON integrated heating of mother board to increase resistance against condensation water during changes of temperature
7. DIP switch position in versions **(C)** and **/C**:
   3 = external power supply
   4 = external power supply – switching 3 and 4 simultaneously. The powering is used from screw 12V (11) due following reasons:
      - using relay mode 7 or 8 – tpermanent switching ON/OFF is possible only with external power supply. Dont forget setup parametr 64.
      - Connection of door intercom to certain type of PBX which has problems with current consumption on its extensions during start (Siemens).
   5 = Camera lighting up (switch ON/OFF lighting of space before camera via infra LED)
   6 = Cards lighting (switch ON/OFF Leds backlighting for cards beside button)
   7 = Activate permanent camera operation. In default camera is active only when door intercom is active.
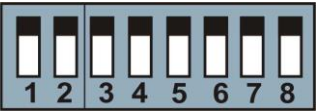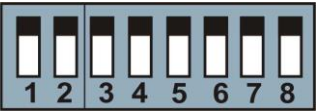   8 = Allows connect 75ohm to camera output - impedance
8. Analog telephone line (not depends on polarity)
9. Grounding – connection to ground of static electricity protection – protects electronic of door intercom as same as PBX
10. Relays are galvanically isolated - max. 48V, max. 1,5A
      model **(C)** has 2 relays
      model **(LC)** has 1 relay only
      on switch 1 is available relay function code (COSW - CodeSwitch) (see page16)
11. Camera output - PAL video 1V / 75ohm. For distance longer than 25m we recommend coax cable. For other installation UTP cable is also available. ***/C model only***
12. 12V power supply: - relays control
                      - mother board heating
                      - cards backlighting
                      - camera powering and infra LED camera lighting up
                      - external powering of unit (DIP 3 and 4)

   The power supply might be AC as same as DC, not depends on polarity, max consumption 250mA from 12V.

   The power supply might be used also for electrical lock powering. Then we recommend power supply 12V/1A.

You can also use 24V DC power supply. It is useful mainly at installations where power supply is already installed and it is used for sliding doors, RFID, etc.. The heating has control element to restrict power.
The remaining components are designed for voltage up 24V DC!!!
It not depends on polarity.

2 Installation

2.1 Assembly

2.1.1 Assembly of Brave Smyle front panel
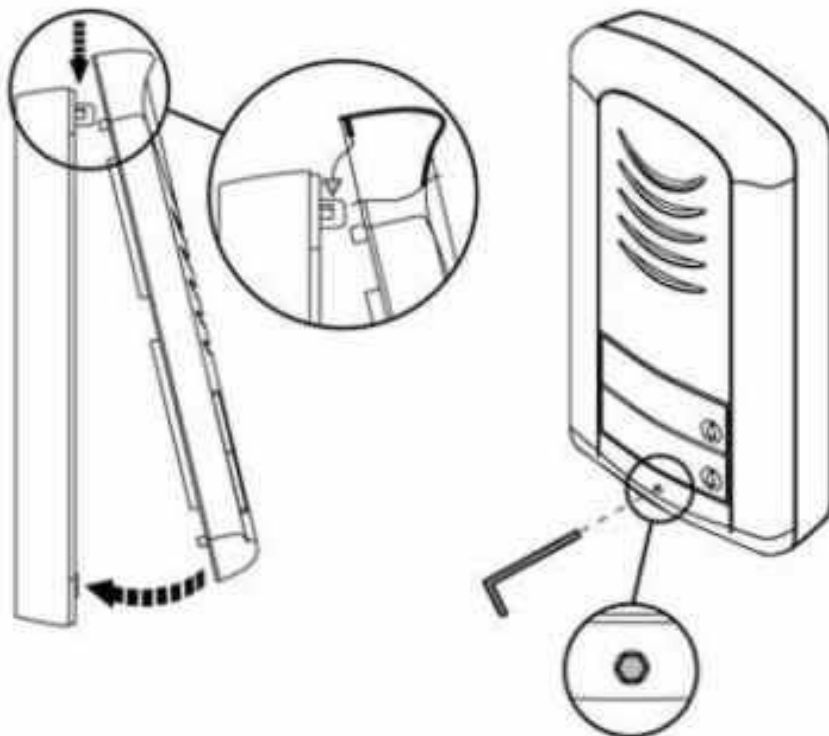
2.1.2 Assembly of cards backlighting

ø 4 mm
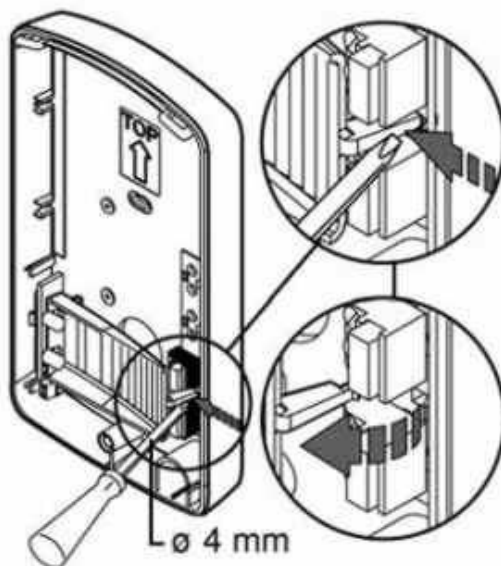
2.1.3 Wall mounting of Brave Smyle

Make the mounting by attached pack with screws and plug (drill 5mm).

1,55 m ÷ 1,65 mm
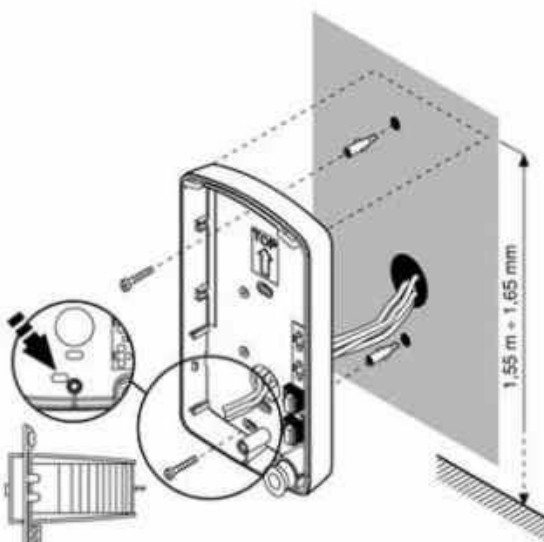
2.1.4   Replacing of cards backlighting after wall mounting
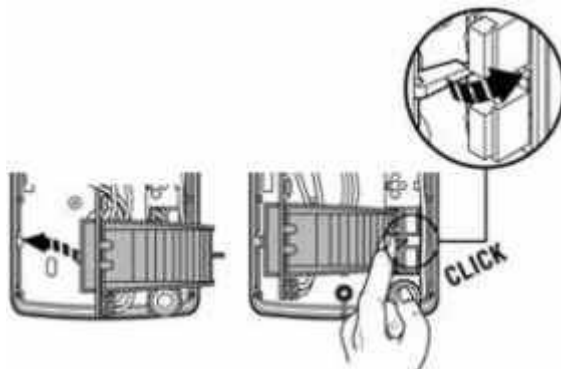
2.1.5   Cards exchange (name cards)
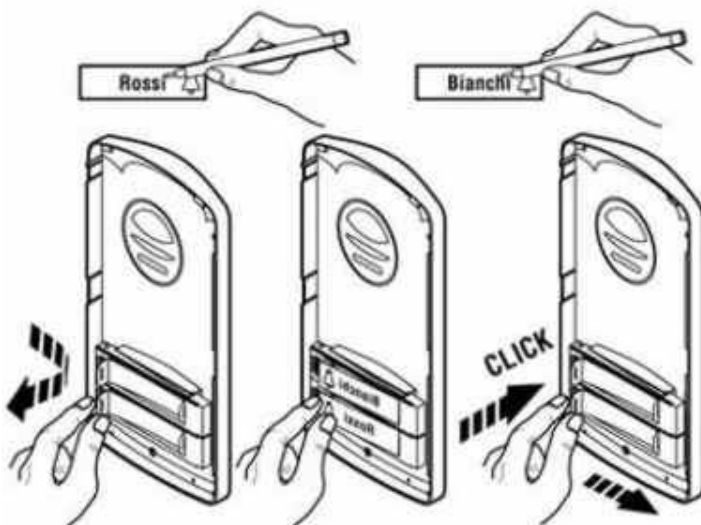
Every button has own card (label) holded by plastic flag (via picture).
You can print out paper labels from special Excel file   (downloadable on www.alphatech.cz or).

2.2 Connection

The basic functionality of intercom (voice communication) needs connection of **telephone line** only - LINE **(8)** on .Pict. 1 Brave Smyle. The line is connected by 2 wires (a,b) and in stand by has usually voltage 24V - 60V, short circuit current 20mA - 60mA. When line is OFF HOOK the line voltage is 7V - 10V.

Line connection Brave Smyle intercom announce by sound signal (Reset) ♫ (capture 3.1 page.21) when is disconnected from line certain time. Brave Smyle is analog intercom designed for connection to analog line(PSTN line or PBX analog extension) it means line where works ordinary analog phone. It works regardless to line polarity and in range mentioned in technical parametres (capture 6).

Paralel connection – we not recommend! Paralell connection with other analog phone or other door intercom is not recommended! We also not recommend use special devices switching the line (inteligent couplers, adapters, etc..).

When model of Brave Smyle is with **camera /C** then on screw **CAM (11)** on Pict. 1. connect cable for video transmission. Up to 25m you can use one free pair of UTP cable. For longer distances you have to use coax cable Pict. 1. Camera mode you setup by DIP switch (capture 1.5) and camera is either activated automatically (when intercom is active) or is permanently ON (DIP 7). Camera lighting up by infra LED is either active with camera (DIP 5) or you can permanently switch OFF. Due DIP 8 you can paralelly connect to video output impedance 75ohm

12V power supply (12) on Pict. 1 must be connected for mother board heating, cards backlighting, camera powering inludes infra LEDs and for relays control. The power supply might be AC and also DC, not depends on polarity. From 12V is max consumption 250mA. Power supply might be used also for electrical lock powering. Then we recommend power supply 12V/1A. You can also use 24V DC power supply. It is useful mainly at installations where power supply is already installed and it is used for sliding doors, RFID, etc..
You can use only 24DC power supply not AC!!! Not depends on polarity.

Relays (10) on Pict. 1 have many possibilities in practise usage. The examples (drawings) are mentioned on Pict. 2. 12V power supply must be connected for correct operation. The intercom unit has galvanically isolated all important parts. Telephone line is isolated from power supply and relays contacts are also galvanically isolated from other intercom electronic parts.

In any case must not be activated directly main voltage 120V or 230V !!! When you need control main devices please use contactors (power relays) as it is on Pict. 2 example (6) .

Relays connection examples are mentiond on following page. It is not all of them but give you an idea how should be connected individual circuits (red rings with numbers = example numbers).

1. Basic connection - 2 elektrical locks and possibility independently control two doors. (relay mode 1 and 2 m=1) or progressive door opening (relay mode 2 m=5 - version **(C)** only.
2. Two power supply – possibility to use independently two power supply One for Brave Smyle and second for electrical locks. Second electrical lock is connected inversaly (fire emergency exit).
3. Combination of doors with electrical lock and sliding gate at fencing.
4. Extending of previous example (3) about second doors with progressive opening (this feature is setup in TimeRelay - optional modul)
5. Combination of electrical lock and additional ring. Relay of additional ring might be in mode m=4 (from each button is activated for preprogrammed time) or in mode m=6 (it is activated from one presetup button for preprogrammed time)
6. Lighting activation m=3 (for example: way to building) and control of for example: heating up DAY/NIGHT mode m=8 (**(C)** version only - RTC circuit). External power supply required (DIP 3 and 4) **/C** version only. Further is neccessary use contactor (Brave Smyle **must not** activate 230V!).

2.2.1 Code relay (COSW)

For the first switch is available function code relay (COSW CodeSwitch). It serves primarily to secure transmission of information by switching the electric lock. When using this function is not possible connecting or disconnecting the voltage at the terminals to lock this lock activated. Activation is performed only when positive result compared serial information transmitted between Brave and the board code relay

Brave is set in several codes to activate the relay code. Relay can be activated codes for one or two impulses can differentiate activated from the phone (DTMF) or from keys (keyboard). The last option is the activation code in another mode switch than the lock.
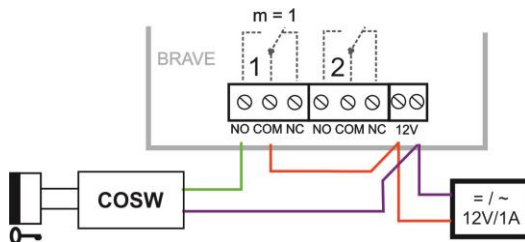
The code information is 8 bits, but the code is 4 bits with security 4 bits which is total of 8 bits. Practically, this is performed so that after activation the switch is first transmits the serial code, and if they agree, so code relay connects the electric lock.

⚠️ The code relays can be connected in parallel to increase the number of switches, but can never combine connections electric lock and the code relay parallel!
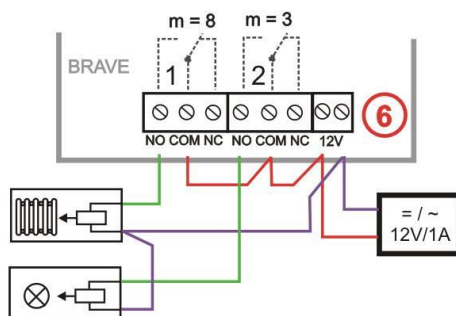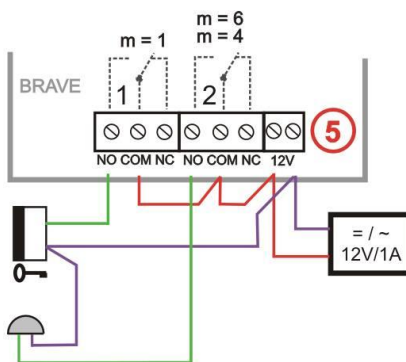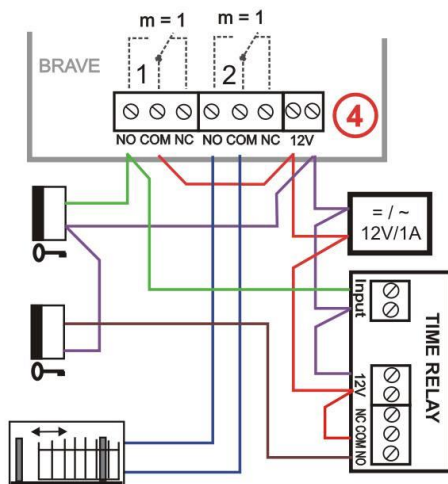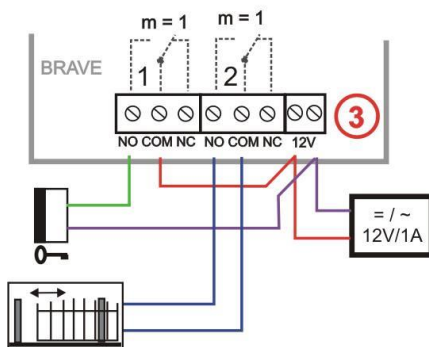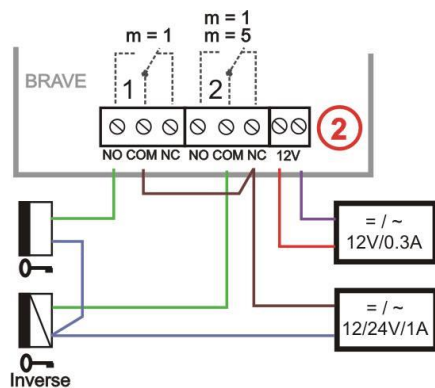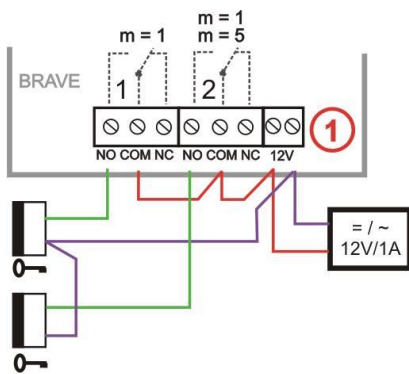
Pict. 2 Examples of relay connection

2.3 Camera (/C version only)

Technical parametres:
- videonorm: PAL-CCIR
- sensor: CMOS 1/3"
- picture area: 5,78x4,19mm
- resolution: 628x582pixel 380 rows
- video output: 1V p-p/75 ohm
- automatic profit control: 18dB
- minimal lighting: 3LUX
- automatic lens shutter: 1/60-1/15000sekund
- camera view: 50st.
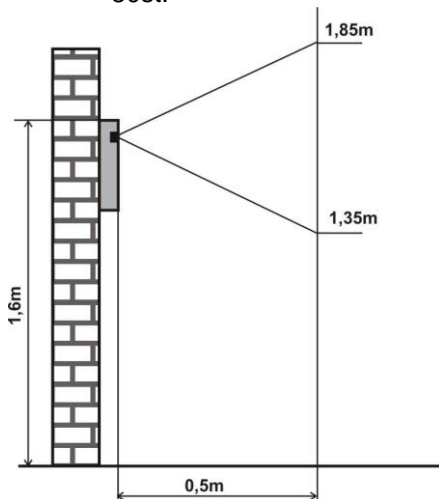
- zoom: manually
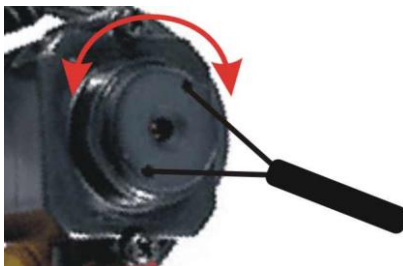
2.4 Accssesories

2.4.1 Weather hood

It increases intercom protection during raining. It is fixed by adhesive labels from sides.

2.4.2 TimeRelay

Time relay allows expansion of relays functionality. It is individual product and detail manual you find on our websites www.alphatech.cz
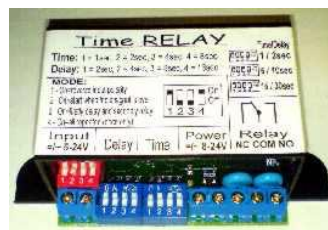
2.4.3 DistyBox

This optional modul is plastic box allows you to connect analog unit (phone, intercom) into wireless system DECT – GAP (for example Siemens line GigaSet, TopCom line Butler etc.). DistyBox is suitable for intercom connection when are cables not available. You just registrate intercom as handset to DECT base station. All features of intercom are kept.

Important: DECT base station must support DTMF transmission between each handsets (relay activation feature).

2.4.4 Power supply 12V

As standard we provide for Brave Smyle intercom AC power supply 12V/1A . It is not part of unit packaging. It must be ordered individualy. More info about electrical locks and power supply on www.alphatech.cz.

2.4.5 Programming cable USB

USB cable is not part of packaging. It must be ordered individualy. USB drivers are downloadable on www.alphatech.cz

2.4.6 BlackBox

BlackBox is DTMF modem useful for remote programming from PC. Via BraveSet programm you can remotely setup all parametres of Brave Smyle intercom.
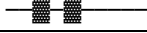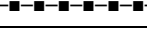
3 Door intercom service

Functionality of Brave Smyle door inercom is adjustable by parametres settings (via. Programming parametres capture page 26).

3.1 Signalling overview

The Brave Smyle door intercom signalling acoustically stages which are happening during operation. Samples of acoustical sounds you can play in BraveSet (PC programm).

Stage	Tones	Tone frequency
Line pick up (OFF HOOK) type 1		980-1333-1650
Line hang up (ON HOOK) type1		1650-1333-980
Line pick up (OFF HOOK) type 2		800-1067-1200-1333
Line hang up (ON HOOK) type2		1333-1200-1067-800
Command confirmation by phone		800
Alerting (knocking) into call		
Call ending alert		1333
Relay activation signal		Modulovaný
Programming enter by phone		980-1067-1180
Programming by phone		Modulovaný
Parametr confirmation		800
Programming enter by PC		980-1067-1180
Line connection (Reset)		1850-1067-1850
Error (generally all incorrects)		800
Memory empty (no number programmed)		1300-2100

During problems identification is very good when you know the tones. It helps you monitor how door intercom works and where from comes the problem. The signalling might be switch of in a few levels (*parametres 61,62,63 and 65*).

3.2 Visitor at the door

Door intercom buttons have signs (cards) like usual ring buttons. Visitor find desired name (for example"Scott") and push it. The Brave intercom pick up the line and "play" tone line pick up (when is not switch off by *par.62*) and dial phone number saved under the button (*parametr 1 or 2* up door intercom mode). From Brave intercom speaker you hear ringing tone and phone of Mr. Scott is ringing. As soon as Mr. Scott pick up ringing phone he can talk to visitor at the door. When is electrical lock connected to Brave intercom then Mr. Scott can open the door for visitor by dial DTMF code on his phone. When Mr. Scott hang up the phone then Brave intercom hangs up as well after busy tone detection. When call duration is longer then setup limit (*parametr 52*) the 10sec before hang up Brave intercom sends alerting tone of call ending. Mr. Scott can dial * or # up setting (*parametr 42*) to prolong the call about the time setup by *parametr 52*.
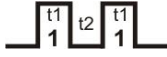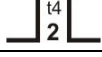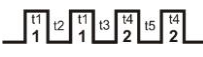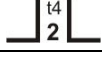
Dialled number from Brave intercom is different up dial mode setup in the unit by (*parametr 47*):
- **Day/Night mode** = when intercom is in DAY mode then number setup by *parametru 1* is dialled. When intercom is in NIGHT mode then always dial number setup by *parametr 2*. Manual intercom modes switching is setup by *parametres 45,46*. In version **(C)** you can switch DAY/NIGHT mode automatically. Selection of dialled number saved under the button is control by time up table *(parametry 00-06).*
- **2 groups numbers mode** = first button push – always dial number setup by *parametr 1.* When the same button is pushed or 10seconds after dial busy tone is detected, or setup number of rings is out (*parametr 56*) the door intercom dial number from second group setup by (*parametr 2*). When you push the same button again you will dial again number from first group etc.……(when after dial number from second group busy tone is detected the repeating is finished)

When visitor push the button after line is picked up the door intercom hangs up for time setup by *parametr 54* and then picks up the line and dial new number (second push number). The number dialling is either by tone dial (DTMF) or pulse dial up setting by *parametr 41*. There is one more option and it is line hangs up by again pushing of same button (parametr 4*).

You can control relay(s) by door intercom buttons (**code lock**). When visitor push buttons in order which match to setup code (*parametr 32-34*) and time between each button press is not longer than setup by (*parametr 53*) then door intercom picks up and activate appropriate relay (when relay setup is mode m=1 or m=5) for time setup by *parametr 37 eventually.39,30*. Then hangs up.

The relay (up control code) can activate one pulse or two pulses with time between each pulse setup by *parametr 30* via. Tab. 1.

mode m = 1	(parametr 3111 and 3121)		
Action	**Note**	**Parametr**	**Relay**
Evaluation of correct external code from buttons		3211-3215	t1 / 1
	According settings DAY/NIGHT	3311-3315	
		3411-3415	
		3221-3225	t4 / 2
	According settings DAY/NIGHT	3321-3325	
		3421-3425	
		321*	t1/1 t2 t1/1
	According settings DAY/NIGHT	331*	
		341*	
		322*	t4/2 t5 t4/2
	According settins DAY/NIGHT	332*	
		342*	
Internal code from phone	You can dial 1 or 2 numbers of code 2digits code is default You can shorter it by using * on first digit of code during programming	351	t1 / 1
		352	t4 / 2
		361	t1/1 t2 t1/1
		362	t4/2 t5 t4/2

Mode m = 5	(parametr 3125)		
Action	**Note**	**Parametr**	**Relay**
Evaluation of correct external code from buttons		3211-3215	t1/1 t3 t4/2
	According settings DAY/NIGHT	3311-3315	
		3411-3415	
		3221-3225	t4 / 2
	According settings DAY/NIGHT	3321-3325	
		3421-3425	
		321*	t1/1 t2 t1/1 t3 t4/2 t5 t4/2
	According settings DAY/NIGHT	331*	
		341*	
		322*	t4/2 t5 t4/2
	According settings DAY/NIGHT	332*	
		342*	
Internal code from phone	You can dial 1 or 2 numbers of code 2digits code is default You can shorter it by using * on first digit of code during programming	351	t1/1 t3 t4/2
		352	t4 / 2
		361	t1/1 t2 t1/1 t3 t4/2 t5 t4/2
		362	t4/2 t5 t4/2

mode m = 4			
Action	**Note**	**Parametr**	**Relay**
Button push	Any button different from 311* or 312*	3114	t1 ⎿‾⎿ 1
		3124	t4 ⎿‾⎿ 2
	Button setup by 311* or 312*	3114	t1 ⎿‾⎿ 1
		3124	t4 ⎿‾⎿ 2
Mode m = 6			
Action	**Note**	**Parametr**	**Relay**
Button push	Any button different from 311* or 312*	3116	-
		3126	-
	Button setup by 311* or 312*	3116	t1 ⎿‾⎿ 1
		3126	t4 ⎿‾⎿ 2

Poznámka: t1 – time activation 1 of relay *(parametr 371)*
t2 – time between pulses 1 of relay *(parametr 301)*
t3 – time between activation 1 and 2 relay *(parametr 39)*
t4 – time activation 2 of relay *(parametr 372)*
t5 – time between pulses 1 of relay *(parametr 302)*

Tab. 1 Table of relay(s) control

3.3 Person inside building

By person inside building we mean person in telephone connection with Brave intercom , for example Mr. Scott.

3.3.1 Outgoing call

Outgoing call is a call from door intercom (generated by visitor). After door intercom dial is ringing a phone inside the building. When you pick up the phone you can talk to visitor. By code dialling you can activate the relay (*parametr 35*) - when relay is setup in mode m=1 or m=5. You also can switch operation mode DAY/NIGHT (*parametr 45,46*) and hang up (*parametr 43*). Door intercom sends 10sec before call ending (*parametr 52*) alerting tone and you can prolong the call by dialling special character from phone (*parametr 42*). By phone hanging up the call is ended (PBX generates busy tone into the line which is detected and door intercom hangs up). There is one more option which is hang up the line by again push of the same button (parametr 4*).

3.3.2 Incoming call

Incoming call is a call into door intercom (generated by person inside the building). After dialling extension number where is connected door intercom the door interocm line is ringing. After setup number of rings the door intercom picks up (*parametr 51*) and you can talk. Other possibilities are the same like in case of outgoing call (capture 3.3.1).

- First exception is first 10sec where you can dial "# and service password" (*parametr 44*). By this you enter programming mode of door intercom.
- Second exception is when DIP1 is switch to position ("SERVIS"). Then you enter programming mode directly without dialling service password.
- Last exception is relay(s) control (*parametr 381 and 382*). You can by programming prohibit to control relay(s) from incoming call .

3.4   Acoustic path setting

The principle of setting acoustic paths:

Here we have three parameters 71.72 and 73 Using the interaction of these parameters can be set to sound in different conditions.

1. quiet environment parameters 71,72,73 are set to 7
2. environment where is a strong ambient noise at the communicator and quiet environment at the phone. Here is both necessary to reduce the microphone gain (parameter 72 = 1-3) and also change the ratio of the parameters 71/73 way 73 enlarge the the parameter (parameter 73 = 11-15) and 71 parameter smaller value (71 = 2-4)
3. environment where is a strong ambient noise at the phone and quiet environment at the communicator. Here we leave the parameter value of 72 = 7 and 73 and 71 parameters set as follows - parameter71 = 11 to 14 and 73 = 2 to 4

The principle of settin parameters is - signal from the microphone is amplified by the sum of parameters **72+71 = volume of microphone** and signal to the speaker is amplified by the sum of parameters **71+73 = volume of speaker**. To switch the direction of the ratio is evaluated parameters (**threshold**) 73/72.

- If parameter 72 is greater than the parameter 73, thus favoring the direction from the microphone. We choose when the direction to the phone is interrupted.
- If parameter 73 greater than parameter 72, thus favored direction to the speaker. We choose this if the interrupted sound in the speaker of communicator.

4 Parametres programming

4.1 Programming by phone

4.1.1 Programming enter

You can enter programming mode by following ways:

1. **password** – incoming call only! – pick up the phone and dial phone number where is door intercom connected *(either extension number when door intercom is connected to PBX or PSTN line number of building where is door intercom installed and let operator connect you to appropriate door intercom extension)*. Door intercom picks up (you hear pick up acoustic tone – via. capture 3.1 page.21) and you have to dial within 10 sec **#xxxx**, when xxxx is service passsword to enter programming mode *(default xxxx=0000)*. When all is correct you hear acoustic tone of programming mode enter and after a while you hear programming tone (via. capture 3.1 page.21).

2. **switch** "SERVIS" – incoming call only! – the connection you establish the same way like in item 1. but only when DIP1 switch is in position "on". Then door intercom after picks up going directly into programming mode without neccessity to insert service password. (via. capture 3.1 page.21).

4.1.2 Parametres programming

Stand by stage of programming is announced by programming tone into which door intercom always returns after time out (5sec) whenever you started to programm.

There are two kind of parametres you can programm. First are parametres with **fix length** – Most of parametres are those. The parametr is saved immediatelly after inserting mandatory length – you hear **confirmation tone.** Second are parametres with **variable length** (*parametr 1, 2,32,33,34*). Saving and confirmation of those parametres is made after 5 seconds inserting last dial. There is one case when those parametres are saved immediately and it is filling up maximal number of characters (numbers) – at *parametr 1 and 2* it is 24, *parametr 32,33,34* it is 6.

When during programming insert number(character) which is unacceptable then door intercom sends **error tone.** The parametr is not saved even changed. Door intercom returns to stand by and you can start again parametr programming of programm other parametr.

When you enter programming mode and do not make any dialling for 30seconds the door intercom will hang up. After each dialled DTMF tone the time is prolonged about 30seconds. You can finish programming mode also by dialling *parametr 9*.

4.2 PC programming – BraveSet programm

For PC programming of door intercom you have to purchase special USB cable USB-KAB and programm BraveSet (free on every CD). Then you have to connect door intercom into the line or at version **/C** or **(C)** switched ON and connected power supply 12V - DIP3 and 4.

Procedure:

- Connect telephone line into door intercom or at version **/C** and **(C)** you can use external power supply 12V (DIP 3,4)
- Connect special USB cable to PC USB socket . Door interocm picks up the line within 3 seconds and play tone of programming enter (via. capture capture 3.1 page.21).
- Run programm BraveSet. Door intercom is in programming mode during all the time when programm BraveSet is running. The door intercom stays pasive until moment of USB cable disconnection. When you loose connection please disconnect USB cable from door intercom and connect it again – door intercom picks up.
- Correct connection PC with BraveSet programm is indicated by reading firmware version from door intercom (visible in bar) as same as reading the time (shown in left top corner). When you have version **(LC)** then time is 0 because LC version doesnt includes RTC circuit.

For easy orientation are parametres in BraveSet programm marked by the same codes like codes for programming by phone.

Details about setting you will find in programm HELP and on website www.alphatech.cz.

USB cable is special cable with galvanical isolation and with 3V convertor. The galvanical isolation is neccessary because telephone line must not be grounded and PC´s are usually grounded.

5 Descriprion of programmable parametres

Parametres always starts by fix, mandatory part (adress) and variable part – it is your dial. Range and explanation is always under each table . All is dial like it is written in table. You dont dial any confirmation character. After savings into memory you get back confirmation tone. When dialled value is incorrect you get immediatelly error tone.

5.1 Direct numbers dial – memories

Parametr	Value	description	Default
1	**tt nn…**	Number nn under button tt	-

tt – button number (memory), always has 2 digits [01-99]

nn – phone number up 24 digits which you desire to save. For saving further characters use assignments mentioned in table.

Numbers saved in parametr 1 are numbers of **first group**, or numbers of **DAY mode**.

Default settings doesnt erase as same as changed those saved numbers.

description	dial
0 - 9	0 - 9
#	#
*	**
Flash	* #
Pause	* 0

Parametr	Value	Description	Default
2	**tt nn…**	číslo **nn** pod tlačítkem **tt**	-

tt – button number (memory), always has 2 digits [01-99]

nn – phone number up 24 digits which you desire to save. For saving further characters use assignments mentioned in table.

Numbers saved in parametr 1 are numbers of **second group**, or numbers of **NIGHT mode**.

Default settings doesnt erase as same as changed those saved numbers.

description	Dial
0 - 9	0 - 9
#	#
*	**
Flash	* #
Pause	* 0

Note: switching DAY/NIGHT mode stays in door intercom even after line disconnection and version (C) this mode switch up current time (when this feature is activated - parametr 084)

Note: at version **Brave Smyle - C** and **Brave Smyle - LC** are available max. 2 buttons - tt=01-02

1. first button should dial at DAY number 358 and in NIGHT 0_603441296 , you programm it - 101358 and wait for ♫, next 2010 ***0** 603441296 and wait for ♫
2. second button should dial at DAY and NIGHT 123#1*2Flash3, you programm 102123#1 ****** 2 ***#** 3 and wait for ♫, next 202123#1 ****** 2 ***#** 3 and wait for ♫

Note. When you dont use mode of 2 group numbers or DAY/NIGHT mode we recommend setup DAY/NIGHT mode *(parametr 47)* and next setup same code for DAY/NIGHT switching *(parametry 45 and 46).* You provide by this that door intercom will be always in DAY mode and then you programm numbers for DAY mode only *(parametr 1).*

5.2 Relay(s)

Parametr	Value	Description		Deafault
31	**r m**	relay **r** works in mode **m**	(1-8)	11 21

r – relay number [1-2]

m – relay mode [1-8 for **r**=1 is not mode m=5]

modes **m=1,4,5,6** are detaily descriped in Tab. 1. on page 24

m=1 mode **relay** – activated by command (internal code) or password (external code) 1 pulse for time t1/t4 (using for electrical locks) or 2 pulses when is activated for time t1/t4, open for time t2/t5 and close for time t1/t4 (sliding door opening)

m=2 closed for time of line OFF HOOK (**camera)** – close when door intercom picks up and open by hanging up

m=3 closed for time of line OFF HOOK and more for time t1/t4 after hang up (**lighting)** – closed when door intercom picks up and stays closed for time t1/t4 after door intercom hangs up (for this time line is busy, at version /C and C is after switching DIP 3,4 and settings *parametr 64* for time t1/t4 line hanged up)

m=4 mode **button** – closed when any button is pushed and open after time t1/t4 (usage for example: connection external bell)

m=5 mode **progressive opening** – you can setup into this mode relay 2 only because relay 1 will be setup automatically into mode m=1. By command (internal code) or password (external code) is activated relay 1 for time t1, then is running time t3 before closing relay 2. Then is relay 2 activated for time t4 and then door intercom hangs up. When dialled command or password match to 2 pulses then in sequence will appear two pulses separated by time t2/t5. Explained in Tab. 1

Note. The command or password for relay 1start whole sequence.When you use command or password for relay 2 then you control relay 2 only the same like in mode m=1.

m=6 closed up pushed button (setup in parametr 31r*). Due this you can select **one button** for every relay its pushing activate appropriate relay for time t1/t4. This mode serves as substitution of ring bell connected to Brave system.

m=7 **permanent closing** / opening – usable at versions **/C** and **(C)** only, if switching (DIP 3,4)+par.64. By command for pulse 1 is closed and for pulses2 is opened. This stage stays in door intercom even after power/line disconnection. This mode you can use for potting, glasshouse opening, heating activation etc..

m=8 activated **up DAY/NIGHT mode settings** - usable at versions **/C** and **(C)** only, if switching (DIP 3,4)+par.64. Version **/C** allows copying manual DAY/NIGHT switching only. Version **(C)** allows copying setting from week table switching time (when is activated - *parametr 084*) and then you can use for example for heating control etc…

Parametr	Value	Description	Default
31	**r* tt**	button tt start relay closing r in mode m=6 (01-99)	01

r – relay number [1-2]
tt – button number (memory), always has 2 digits [01-99]
This parametr is for relay mode m=6 only. Value of tt designate from which button start closing for time t1/t4 of relay r.

Parametr	Value	Description	Default
32	**rp hh...**	In mode **DAY + NIGHT** password **hh...** for relay **r,** in order p=1-5, for 1 pulse and p=* for 2 pulses (00-999999)	-
33	**rp hh...**	In mode **DAY** password **hh...** for relay **r,** in order p=1-5, for 1 pulse and p=* for 2 pulses (00-999999)	-
34	**rp hh...**	In mode **NIGHT** password **hh...** for relay **r,** in order p=1-5, for 1 pulse and p=* for 2 pulses (00-999999)	-

r – relay number [1-2]

p – order [1 - 5] for 1 pulse. 5 passswords (external codes) from door intercom buttons (external code of codelock)

p – order = *, then you can insert just one code (external code) for closing by 2 pulses

hh... – password (external code) for relay closing from buttons [2 to 6 digits]. Tlačítka 1 - 10 are programmable as numbers 1-0.

Totally 3 x 12 passwords. Controlled by settings DAY/NIGHT. Combination is inserting by door intercom buttons. Relay closing is influenced by setup relay **mode** and switching **DAY/NIGHT.** When is setup mode **2 groups of numbers** the door intercom is permanently in mode **DAY**.

You have to keep certain rules for password dialling:
- First button of password select from at least used button for direct dialling (-prolong dial time)

- Caution on numbers identity of password. When one password includes other, for example:password for relay1 is 1234 and for relay 2 12345, then always after pushing button 4 relay 1 will be activated and relay 2 wont be never acivated. When you select password for relay 2 234, then after button 4 pushing both relays will be activated.

Note1. switching to DAY/NIGHT mode stays setup in door intercom even after power (line) disconnection. At version **(C),** when is activated, then DAY/NIGHT switching is done up time and week table.

Note2. when you insert parametres *32,33,34* do not use character # and * because you cant select them from button panel. Number 0 represents button 10.

Parametr	Value	Description	Default
35	**r aa**	command **aa** from phone for relay activating **r** 1 pulse (00-99,*0-*9)	155 266

r – relay number [1-2]

aa – command (internal code) from phone for relay activation [2 digits] /[1]

For both relays you can setup the same command (internal code) then both relays are activated simultaneously. It is profitable to setup the same command for relay activation as same as door intercom hang up (*parametr 43*) **aa=bb**.

/[1] – command has always 2 digits but when you want control relay by **1 digit** only (from keypad of phone) then you have possibility to programm " ***a** " where **a** is one number only which activate the relay (star represents empty character and must be on first digit position).

Example: 1 relay activated by internal code 48 - dial **35148** ♫

2 relay activated by internal code 8 - dial **352*8** ♫

By dialling on phone 8 you activate relay 2 by dialling 48 you activate both relays

Parametr	Value	Description	Default
36	**r cc**	command **aa** from phone for relay activation **r** 2 pulses (00-99,*0-*9)	150 260

r – relay number [1-2]

cc – command (internal code) from phone for relay activation [2 digits] /[1]

For both relays you can setup the same command (internal code) then both relays are activated simultaneously.

/[1] – command has always 2 digits but when you want control relay by **1 digit** only (from keypad of phone) then you have possibility to programm " ***a** " where **a** is one number only which activate the relay (star represents empty character and must be on first digit position).

Activation relay 2 pulses is suitable for example: at sliding gate which this way can also substitute wicket for person entrance.

Example: command to activate relay1 with 1 pulse ***8**, command to hang up ***8** and command for activation relay2 with 2 pulses ***9**.
Dial: **352*8 ♫** , **432*8 ♫** , **362*9 ♫**.
You are in communication with door intercom unit. Dial command for open sliding gate **9**. First pulse starts sliding the gate and second pulse stop it. The size of spot for person entrance is according time between each pulses (*parametr 30*). After person etnering you dial **8.** The door intercom makes one pulse and hang up. Sliding gate is closing.

Parametr	Value	Description	Default
37	**r ss**	time **ss** [sec] activation relay **r** for time **t1/t4** (00-99)	105 205

r – relay number [1-2]

ss – time t1 / t4 for which is relay closed 1 / 2 [2 digits 00-99], where time 00 means 0,5sec

Parametr	Value	Description	Default
38	**r p**	Control relay **r** during incoming call (0/1)	11 21

r – relay number [1-2]

p – parametr which says permitted **p=1** or forbidden **p=0** control relay during incoming call

To prohibit control of relay during incoming call has a sense for example by relay2 in mode 1 by which you control sliding gate opening where door intercom open the gate and after car passing the gate is closed. Then control by phone could make unwillingly permanent gate opening.

Parametr	Value	Description	Default
39	**xx**	time **xx** [sec] between activation relay 1 and 2 in mode m=5 - time **t3** (01-99)	10

xx – time t3 between activation relay 1 and 2 when mode **m=5** is setup (progressive opening) [2 digits 00-99]], when time 00 means 0,5sec

Parametr	Value	Description	Default
30	**r zz**	time **zz** [sec] between pulses when is closing for 2 pulses relay **r** - time **t2/t5** (00-99)	105 205

r – relay number [1-2]

zz – time t2 / t5 between first and second pulse relay activation 1 / 2 [2 digits 00-99], where 00 means 0,5sec

Parametr	Value	Description	Default
3#0	**p**	p = 1 enabled / disabled p = 0 connection code relay COSW (0/1)	0

p – turns on transmission serial code to activate the first switch.

CAUTION - at activation this function never connect to the circuit electric lock without board COSW - code relay - threatens to destroy the relay in Brave communicator!

The following codes may be the same or different for the resolution switching on multiple parallel connected relay code.

Parametr	Value	Description	Default
3#1	**abcd**	activation code 1 pulse from buttons (0000-1111)	0000

abcd – Brave sends a serial code for the code relay (COSW) after evaluation code from keys (keyboard) namely for 1 pulse

Parametr	Value	Description	Default
3#2	**abcd**	activation code 1 pulse from phone (0000-1111)	0000

abcd – Brave sends a serial code for the code relay (COSW) after evaluation code from telephone (DTMF) namely for 1 pulse

Parametr	Value	Description	Default
3#3	**abcd**	activation code 2 pulses from buttons (0000-1111)	0000

abcd – Brave sends a serial code for the code relay (COSW) after evaluation code from keys (keyboard) namely for 2 pulses

Parametr	Value	Description	Default
3#4	**abcd**	activation code 2 pulses from phone (0000-1111)	0000

abcd – Brave sends a serial code for the code relay (COSW) after evaluation code from telephone (DTMF) namely for 2 pulses

Parametr	Value	Description	Default
3#5	**abcd**	activation code from other modes of switch (0000-1111)	0000

abcd – Brave sends a serial code for the code relay (COSW) after evaluation code from other modes m switch 1

BRAVE – *user guide*

5.3 Basic parametres

Parametr	Value	Description		Default
41	**v**	Dial type **v** – tone / pulse	(0/1)	0

v – dial type **v=0** is DTMF tone dial, **v=1** pulse dial

Parametr	Value	Description		Default
42	**z**	Character to prolong the call	(* / #)	*

z – character to prolong the call * or # (10sec before call termination door intercom sends notification then you can prolong the call)

Parametr	Value	Description		Default
43	**g bb**	Command to hang up door intercom by phone	(00-99,*0-*9)	155 266

g – command order [1-2] (they are two to be possibility hang up door intercom when each relay is used)

bb – command to hang up door intercom by phone [2 digits] /[1]

It is profitable setup the same command to hang up door intercom as same as activate relay *(parametr 35,36)* **aa=bb or aa=cc**

/[1] – command has always 2 digits but if you want use **1 digit** then you have possibility insert " ***a** " where **a** is just one number which activate the relay (star represents empty character and must be on first position). *(Example at parametres 35,36)*

Parametr	Value	Description		Default
44	**xxxx**	Service password	(0000-9999)	0000

xxxx – service password to enter programming by phone (DTMF)

Parametr	Value	Description	Default
45	**dd**	Command to switch into **DAY** mode (00-99,*0-*9)	11
46	**nn**	Command to switch into **NIGHT** mode (0099,*0-*9)	10

dd – command to switch into **DAY** mode [2 digits] /[1]

nn – command to switch into **NIGHT** mode [2 digits] /[1]

/[1] - command has always 2 digits but if you want use **1 digit** then you have possibility insert " *a " where **a** is just one number which switch **DAY/NIGHT** mode (star represents empty character and must be on first position).

Note. Switching into DAY or NIGHT mode stays setup even after power (line) disconnection from door intercom

Parametr	Value	Description	Default
47	**e**	Door intercom dial mode (0/1)	1

e – dial numbers mode **e=0** dial numbers from first and second group, **e=1** numbers are dialled up **DAY/NIGHT** mode in door intercom

CAUTION !! setting of this parametr has a big influence to numbers dialling

Parametr	Value	Description	Default
4*	**k**	Feature of line hanging up by again push of the same button (0/1)	1

k – line hanging up by push of same button:

    k=0 feature is switch off

    k=1 again button push hang up the line

CAUTION !! setting of this parametr has a big influence to numbers dialling

5.4 Time parametres

Parametr	Value	Description	Default
51	**q**	Number of rings before door intercom picks up incoming call (1-9)	2

q – number of incoming call rings . Door intercom picks up between rings and 2 sec after detection of **q** – th rings. Number is adjustable from 1 to 9.

Parametr	Value	Description	Default
52	**d**	Maximal call duration (0-9,*,#)	2

d – maximal time for which door intercom is OFF HOOK. This time you can prolong by dial character during a call by phone (* or # - *parametr 42*). Setting of time is up table.

time[min]	Dial
0,5	0
1 - 9	1 - 9
15	*
30	#

Parametr	Value	Description	Default
53	**w**	Time between button push (1-9)	2

w – maximal time [sec] between button push [range 1-9]
- ▪ *normal buttons*
- **relay activation** – when time between push of 2 following buttons is longer than time **w** then code is evaluated incorrectly.
- **Number dial** – when button which we push is first number in password for relay activation then dial is delayed about this time **w**

Parametr	Value	Description		Default
54	**z**	Hanging up time during REDIAL	(1-5)	2

z – time [sec] for which door intercom hangs up before pick up for REDIAL (button push during call, busy tone detection) [range 1-5]

Parametr	Value	Description		Default
55	**z**	Time before start dialling	(1-5)	1

z – time [sec] after door intercom picks up and before start dialling [range 1-5]. This time is different for every PBX but usually all PBXs accepts dial within 2 seconds after line is picked up.

Parametr	Value	Description		Default
56	**hh**	Number of rings before hang up	(04-99)	12

h – after dial termination calculate number of CRT (control ring tones). When number is higher than **hh** then hang up [range 04-99]. Dial is repeated in case of 2 groups mode.

Parametr	Value	Description		Default
500	**x**	Middle frequency of tones detector	(1-0)	3 (375-475Hz)
501	**y**	Number of busy tones	(2-0)	4
502	**z**	Time of permanent tone duration	(1-5)	3 (3s)

x – middle frequency of tones detector – is suitable when PBX signalling is unusual:

frequency [Hz]	x - dial
275-375	1
325-425	2
375-475	3
425-525	4
475-575	5
525-625	6
575-675	7
625-725	8
675-775	9
725-825	0

y – minimal number of busy tones neccessary for detection [2-0], where 0 means 10 busy tones

z – minimal time of permanent tone duration (for dial tone detection on PBX) [1-5 sec]

Parametr	Value	Description	Default

503	**tt**	Time of tone duration DTMF (tone) dial (04-16)	10 (100ms)
504	**mm**	Time of space duration between DTMF tones (04-16)	10 (100ms)
505	**f**	Time of Flash duration (1-6)	1 (100ms)
506	**p**	Time of pause duration / pause between numbers (1-0)	4 (800ms)

tt –Time of tone duration DTMF (tone) dial is calculated up:
> *(inserted number) x 10 = tone duration time* [ms]

> [range 04-16 tj. 40-160ms]

m – Time of space duration between DTMF tones is calculated up:
> *(inserted number) x 10 =pause duration time* [ms]

> [range 04-16 tj. 40-160ms]

f – Time of Flash duration is calculated:
> *inserted number x 100 = Flash duration time* [ms]

> [range 1-6 tj. 100-600ms]

p – Time of pause duration is calculated:
> *inserted number x 100 + 400 = pause duration time* [ms]

> [range 1-0 tj. 500-1400ms]

> – time **p** is also time of pause between numbers at pulse dialling

Parametr	Value	Description	Default
507	**uu**	Level of sending tone DTMF dial in [-dBm](04-16)	10

uu – level of sending tone (DTMF) dial into line, range is -4 to -16dBm. You insert desired level, uu=04 is -4dBm, uu=10 is -10dBm

Parametr	Value	Description	Default
508	**p**	preemphase DTMF (0/1)	0
509	**S**	Listening –in DTMF - level (1-4)	2

p – preemphase is rate between upper and lower groups of DTMF frequency. You can select rate 2,2 dB - p=0 (Europe) or rate 3,2dB - p=1 (Australia)

s – listening –in DTMF level you can select in four levels:

Level of listening in DTMF [dB]	s - dial
-15	1
-9	2
-3	3
+3	4

BRAVE – user guide

5.5 System parametres

Parametr	Value	Description	Default
61	**z**	Acoustic signalling (confirmation, error, empty memory, call termination...) (0/1)	1

In default the stages of door intercom are acoustically signalling. By parametr „**z"** you can switch off this signalling. Possible values are

     z=0 – signalling is off

     z=1 – signalling is on

Parametr	Value	Description	Default
62	**v**	Acoustic signalling off hook/on hook (0/1/2)	1

In default is signalling pick up and hang up of the line. If you identify some problems at certain PBXs you can switch it off by parametr „**v"** . The possible values are:

     v=0 – signalling OFF HOOK / ON HOOK is off

     v=1 – signalling OFF HOOK / ON HOOK is on (type 1)

     v=1 – signalling OFF HOOK / ON HOOK is on (type 2)

Parametr	Value	Description	Default
63	**u**	Acoustic signalling knocking to call (0/1)	0

In default it is switch off. By activation of this feature you can identify at PBX calling from door intercom just up knocking into call. Possible values are:

     u=0 – knocking to call is off

     u=1 – knocking to call is on

Parametr	Value	Description	Default
64	**w**	Powering from external power supply 12V (DIP 3,4) (0/1)	0

In version **/C** only or at version **(C)** .

In default external power supply is OFF.

Activation has a sense only in cases when door intercom should make some operation during stand by mode – relay activation. Relay in mode **m=7** allows permanent closing even after call termination. Relay mode **m=8** allows activation up DAY/NIGHT mode settings even after call termination. In those cases you have to provide external power supply to dont flow current at hanged up line. The DIP switch 3 and 4 must be in position „on" to activate this parametr **w=1** . Deactivation - **w=0**.

Parametr	Value	description	Default
65	**z**	Acustic signalling of relay activation (0/1)	0

In default the activation is off **z=0**. Usually you can use this fetaure for DC power supply 12V. Then when el.lock is released you dont hear „buzzing" so visitor doesnt know that el.lock is released. When you activate this feature **z=1** then during relay activation you hear special sounds simulating relay activation.
Note.1 *This feature is available for relay mode m=1, m=5 only.*
Note.2 *For relay activation with 2 pulses the acoustic signalling sounds during whole time of sequence. (even in space between pulses)*

Parametr	Value	Description	Default
66	**i**	Suppression of DTMF reception from microphone (0/1)	0

In default the suppression of DTMF reception from MIC is off **i=0**. Due this you can activate relay by personal dialler without ringing to person inside building. To increase security you can activate suppression of DTMF reception from microphone **i=1** and due this protect entrance of persons who provided record of DTMF code for door opening.

Parametr	Value	Description	Default
67	**b**	BabyCall – call without neccessity programm phone number (0/1)	0

In default is switch off **b=0**. By activation this feature **b=1** is cancelled acoustic signalling of empty memory. After pushing of button with empty memory you get just beep (confirmation) and call is established as normal dialled number
Caution: first 10sec of call is not active tone detector (it waits on reaction of PBX and number dialling by PBX)

Parametr	Value	Description	Default
6*	**t**	delay start for PBx´s with line testing (Siemens) (0/1)	0

In default is switch off **t=0**. By activation this feature **t=1** is processor going to „sleep mode" after line connection and after 3sec the door intercom makes initialization. It delays line picks up after line (voltage) connection – activation status / PBX restart. When this feature is not efficient and PBX still evaluate the line into „failure" mode" then you have to use external power supply – put **DIP** switch **3** and **4** to position "**on**" – possible at version **/C (C)** only. It is the same like using **Best Box** option.

5.6 HandsFree parametres setting

Parametr	Value	Description		Default
71	**gg**	Reception loudness	01-16 (16 is highest) (SPK)	07
72	**ff**	Transmission loudness 01-16 (16 is highest) (MIC)		07
73	**rr**	Speaker loudness	01-16 (16 is highest) (TRH)	07

gg / ff / rr – numbers are inserted always by 2 digits in range [01-16]

After reception of confirmation ♫ is new value immediatelly active and you can test it.

Help: except inserting of direct values 01-16 you can add/ decrease amplification

+/- by buttons on phone ***** = **-** and **#** = **+**

Limits of maximal and minimal loudness are acoustically signalling (3 tones as call termination signalling. When you dont press any digit within 5sec then setup value is saved and you hear confirmation tone ♫.
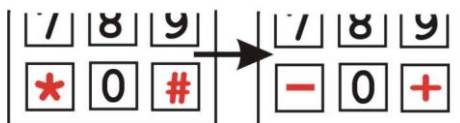
CAUTION !! We dont recommend factory setting if neccessary.

Parametr	Value	Description		Default
74	**c**	Soft pass of switching	(0/1)	1

In default this feature is off **c=0.** It is going about character of on line operation semiduplex switching. In case where character of depresser is too steep you can make it softer by **c=1**.

Parametr	Value	Description		Default
75	**n**	Depression of background sound	(0/1)	1

In default it is off **n=0.** When door intercom is installed in noicy environment (noicy streets, subway stations, parkings…) then by activation of this circuit **n=1** is setup level of noice as start level for microphone activation. Then the call connection is not one way opened. It relates with setup of parametres 71, 76, 77.

Parametr	Value	Description	Default
76	**b**	Level of microphone start 1-4 (4 is highest)	2

On the line is simultaneously signal from microphone and speaker. In handsfree circuit is a few functional blocks to suppress acoustic shock. The basic one is circuit of semiduplex operation when incoming signal decrease microphone amplificatio as same as signal from microphone decrease incoming signal. The level of microphone start is setup by this parametr.. As lower value as higher microphone sensitivity is. In noicy environment we recommend higher value with combination of parametrs 71,75, 77.

Parametr	Value	Description	Default
77	**s**	Fast switching voice automatic 1-4 (4 is slowest)	2

At parametres 75, 76 is descriped principal of acoustic shock supression. Speed of circuit switching between incoming and outgoing sound is setup by parametr 77.

Switching time [ms]	**S** - dial
1	1
2	2
4	3
8	4

Parametr	Value	Description	Default
78	**I**	VoltAmper (VA) charakteristic of line connection (0/1)	1

Almost every country around the world has different telephone directives and this parametr allows decrease voltage at door intercom line interface about 1V during OFF HOOK. Where directive requires decreasement of line voltage **I=0** decrease voltage about 1V. In default **I=1**.

Parametr	Value	Description	Default
79	**k**	Compemsation of wires losses depends on line current (0/1/2)	1

Door intercom Brave includes circuit which during long distance installations (100m and more from PBX) can compensate losses on wiring. In default the feature is off **k=0**. You can setup in two levels depending on line current of PBX (short circuit current I_0).

PBX current I_0	**k** - dial
Feature is off	0
20mA-50mA	1
45mA-75mA	2

Parametr	Value	Description	Default
70	**uu**	Transmission signalling level in [-dBm] (04-16)	10

uu – transmission signalling level to the line, range -4 to -16dBm. You insert desired level, uu=04 is -4dBm, uu=10 is -10dBm ...

5.7 Time programm – automatic DAY/NIGHT switching (C)

(C) version only !

Parametr	Value	Description	Default
09	**a**	ON / OFF automatic DAY/NIGHT switching and setting time control (0/1/#)	**0**

When door intercom Brave includes RTC circuit - **(C)** version then you can activate automatical switching from real time **a=1**. The condition is correct time settings. You can verify it easily by diallingu **a=#** and door intercom reply either by confirmation tone (all is correct) or error tone (you have to setup the time). By dial **a=0** you deactivate automatical switching.

Parametr	Value	Description	Default
081	**hhnn**	Time settings hh-hours, nn-minutes	**-**
082	**ddmmyyw**	Date settings dd-day, mm-month, yy-year, w-weekday	**-**
083	**#**	wait 1 min for seconds zeroing	**-**

Internal clocks parametres setting. After setting by command **083#** zeroing seconds setting any through this agreed clocks exactly up seconds.

w - weekday: 0 - Sunday
                    1 - Monday
                    2 - Tuesday
                    3 - Wednesday
                    4 - Thursday
                    5 - Friday
                    6 - Saturday

__Example:__ you want set 27.5.2011 9:39 (its Friday), then dial sequence:
0822705115 you hear tone ♫, then dial 0810939 hear tone ♫ and finally dial 083 – wait for exact time sec=0 . In this moment dial # and you hear tone ♫ - finished.

Parametr	Value	Description	Default
00	hhnnkkjj	**sunday** – time setting hours **hh** and minutes **nn** starts **day** and hours **kk** and minutes **jj** starts **night**	00000000
01	hhnnkkjj	**monday** - time setting hours **hh** and minutes **nn** starts **day** and hours **kk** and minutes **jj** starts **night**	00000000
02	hhnnkkjj	**tuesday** - time setting hours **hh** and minutes **nn** starts **day** and hours **kk** and minutes **jj** starts **night**	00000000
03	hhnnkkjj	**wednesday** - time setting hours **hh** and minutes **nn** starts **day** and hours **kk** and minutes **jj** starts **night**	00000000
04	hhnnkkjj	**thursday** - time setting hours **hh** and minutes **nn** starts **day** and hours **kk** and minutes **jj** starts **night**	00000000
05	hhnnkkjj	**friday** - time setting hours **hh** and minutes **nn** starts **day** and hours **kk** and minutes **jj** starts **night**	00000000
06	hhnnkkjj	**saturday** - time setting hours **hh** and minutes **nn** starts **day** and hours **kk** and minutes **jj** starts **night**	00000000
07	**#**	overwrite (copyright) setting from sunday (00) into whole week	-

By parametres 00-06 are setting times of automatic switching DAY/NIGHT for every day in week. The parametr 07 is designed for copying when setting is the same for whole week. Then you setup switching times for parametr 00 (sunday) and then by parametr 07# you copy this setting into remaining days.

Examples:

1. monday 8:00 starts day, 17:05 starts night, tuesday 7:30 starts day and in 16:00 starts night.

    Setting sequence: 0108001705 and ♫, then 0207301600 and ♫

2. In Thursday starts day 6:45 and night starts 15:05, on Friday night continue until 15:00 and then starts day and it is until saturday 12:00 , then is night. Here you can use setting of switching inside one day into night even night is still valid from previous day and again switching into day even day is valid from previous day. Then for setting after midnight you insert time 00:00.

    Setting sequence: 0406451505 and ♫, 0515000000 and ♫, 0600001200 and ♫

5.8 Default settting and erasing

Parametr	Value	Description	Default
8#	**#**	Default	execute

This setting doesnt change parametres **1** and **2** (numbers saved in memories)

Parametr	Value	Description	Default
81		Erase all numbers in group 1 (Day mode)	
82		Erase all numbers in group 2 (Night mode)	
83		Default settings for parametres 3x only	3 only..
84		Default settings for parametres 4x only	4 only..
85		Default settings for parametres 5x only	5 only..
86		Default settings for parametres 6x only	6 only..
87		Default settings for parametres 7x only	7 only..
80		Default settings for parametres 0x only	0 only..

Parametres 81 and 82 makes erasing of all numbers saved in button memories.
Parametres 83 – 87,80 makes default settings for parametres starts 3,4,5,6,7,0 only. Default settings values are mentioned at every parametr in right - column "Default".
__CAUTION !!!__ the erasing is unreturnable !!! it is neccessary programm again

5.9 Programming termination

Parametr	Value	Description	Default
9		E N D of programming	

After **9** dial in programming tone the door intercom hangs up.

5.10   Parametres overview

Parametr	Value	Description	Default
1	**tt nn…**	number **nn** under button **tt**	-
2	**tt nn…**	number **nn** under button **tt**	-
31	**r m**	relay **r** works in mode **m** (1-8)	11 21
31	**r* tt**	button tt activate relay closing r in mode m=6 (01-99)	01
32	**rp hh...**	In mode **DAY + NIGHT** password **hh...** for relay **r,** in order p=1-5, for 1 pulse and p=* for 2 pulses (00-999999)	-
33	**rp hh...**	In mode **DAY** password **hh...** for relay **r,** in order p=1-5, for 1 pulse and p=* for 2 pulses (00-999999)	-
34	**rp hh...**	In mode **NIGHT** password **hh...** for relay **r,** in order p=1-5, for 1 pulse and p=* for 2 pulses (00-999999)	-
35	**r aa**	command **aa** from phone for closing relay **r** 1 pulse (00-99,*0-*9)	155 266
36	**r cc**	command **aa** from phone for closing relay **r** 2 pulses (00-99,*0-*9)	150 260
37	**r ss**	time **ss** [sec] relay closing **r** for time **t1/t4** (01-99)	105 205
38	**r p**	Relay control **r** during incoming call (0/1)	11 21
39	**xx**	time **xx** [sec] between relay closing 1 and 2 in mode m=5 - doba **t3** (01-99)	10
30	**r zz**	time **zz** [sec] between pulses during closing for 2 pulses of relay **r** - doba **t2/t5** (01-99)	105 205
3#0	**p**	p = 1 enabled / disabled p = 0 connection code relay COSW (0/1)	0
3#1	**abcd**	activation code 1 pulse from buttons (0000-1111)	0000
3#1	**abcd**	activation code 1 pulse from phone (0000-1111)	0000
3#1	**abcd**	activation code 2 pulses from buttons (0000-1111)	0000
3#1	**abcd**	activation code 2 pulses from phone (0000-1111)	0000
3#5	**abcd**	activation code from other modes of switch (0000-1111)	0000
41	**v**	Dial type **v** – tone / pulse (0/1)	0
42	**z**	Character for call prolongation (* / #)	*

43	**g bb**	Command to hang up door intercom by phone (00-99,*0-*9)	155 266
44	**xxxx**	Service password (0000-9999)	0000
45	**dd**	Command to switch into **DAY** (00-99,*0-*9)	11
46	**nn**	Command switch into **NIGHT** (0099,*0-*9)	10
47	**e**	Door intercom dial mode (0/1)	1
4*	**k**	Feature of line hanging up by again push of the same button (0/1)	1
51	**q**	Number of rings before door intercom pick up incoming call (1-9)	2
52	**d**	Maximal call duration (0-9,*,#)	2
53	**w**	Time between button push (1-9)	2
54	**z**	Hang up time before REDIAL (1-5)	2
55	**z**	Time before dial start (1-5)	1
56	**hh**	Number of ringing before hang up (04-99)	12
500	**x**	Middle frequency of tone detector (1-0)	3 (375-475Hz)
501	**y**	Number of busy tones (2-0)	4
502	**z**	Duration time of permanent tone (1-5)	3 (3s)
503	**tt**	Duration time of tone DTMF of tone dial (04-16)	10 (100ms)
504	**mm**	Time of space between each DTMF tones (04-16)	10 (100ms)
505	**f**	Flash duration time (1-6)	1 (100ms)
506	**p**	Pause duration time / space between numbers (1-0)	4 (800ms)
507	**uu**	Transmitting level of DTMF dial in [-dBm] (04-16)	10
508	**p**	preemphase DTMF (0/1)	0
509	**S**	Listening in DTMF – level (1-4)	2
61	**z**	Acoustic signalling (confirmation,error, empty memory, call termination...) (0/1)	1
62	**v**	Acustic signalling OFF HOOK /ON HOOK (0/1)	1
63	**u**	Acoustic signalling of beeping into call (0/1)	0
64	**w**	External powering from power supply 12V (DIP 3,4) (0/1)	0
65	**z**	Acoustic signalling of relay activation (0/1)	0

66	i	Depression of DTMF reception from microphone (0/1)	0
67	b	BabyCall – call without neccessity to insert phone number (0/1)	0
6*	t	Delay start for PBX´s with extension test (Siemens) (0/1)	0
71	gg	Reception loudness 01-16 (16 is highest) (SPK)	07
72	ff	Transmission loudness 01-16 (16 is highest) (MIC)	07
73	rr	Speaker loudness 01-16 (16 is highest) (TRH)	07
74	c	Soft pass of switching (0/1)	1
75	n	Depression of background sound (0/1)	1
76	b	Level of microphone start 1-4 (4 is highest)	2
77	s	Fast switching voice automatic 1-4 (4 is slowest)	2
78	l	VoltAmper (VA) charakteristic of line connection (0/1)	1
79	k	Compemsation of wires losses depends on line current (0/1/2)	1
70	uu	Transmission signalling level in [-dBm] (04-16)	10
09	a	ON/ OFF automatic switching DAY/NIGHT mode and time settings control (0/1/#)	0
081	hhnn	Time settings hh-hours, nn-minutes	-
082	ddmmyy	Date settings dd-day,mm-month,yy-year	-
083	#	Wait for 1 min for seconds zeroing	-
00	hhnnkkjj	**sunday** - time setting hours **hh** and minutes **nn** starts **day** and hours **kk** and minutes **jj** starts **night**	00000000
01	hhnnkkjj	**monday** - time setting hours **hh** and minutes **nn** starts **day** and hours **kk** and minutes **jj** starts **night**	00000000
02	hhnnkkjj	**tuesday** - time setting hours **hh** and minutes **nn** starts **day** and hours **kk** and minutes **jj** starts **night**	00000000
03	hhnnkkjj	**wednesday** - time setting hours **hh** and minutes **nn** starts **day** and hours **kk** and minutes **jj** starts **night**	00000000
04	hhnnkkjj	**thursday** - time setting hours **hh** and minutes **nn** starts **day** and hours **kk** and minutes **jj** starts **night**	00000000
05	hhnnkkjj	**friday** - time setting hours **hh** and minutes **nn** starts **day** and hours **kk** and minutes **jj**	00000000

		starts **night**	
06	**hhnnkkjj**	**saturday** - time setting hours **hh** and minutes **nn** starts **day** and hours **kk** and minutes **jj** starts **night**	00000000
07	**#**	overwrite (copyright) setting from sunday (00) into whole week	-
8#	**#**	default	execute
81		Erase all numbers in group 1 (DAY mode)	
82		Erase all numbers in group 2 (NIGHT mode)	
83		Default setting for parametres 3x only	3 only..
84		Default setting for parametres 4x only	4 only..
85		Default setting for parametres 5x only	5 only..
86		Default setting for parametres 6x only	6 only..
87		Default setting for parametres 7x only	7 only..
80		Default setting for parametres 0x only	0 only..
9		END	

6 Technical parametres

6.1 Elektrical parametres

Parametr	Value	Conditions
Minimal line current	18mA	Line OFF HOOK
Minimal line voltage	18V	Line ON HOOK
Line voltage during OFF HOOK (VA characteristic)	< 8V < 12V [1])	I = 20mA I = 60 mA
Downlead during ON HOOK	< 30uA	U = 60V
Line termination impedance	220R + 820R paral. 115nF	Line OFF HOOK
Bandwidth	300Hz – 3400 Hz	20 - 60mA
Ringing impedance	> 2Kohm	25 – 60 Hz
Sensitivity of ringing detector	min. 10 – 25 V	
Pulse dial	40 / 60 ms	
Tone dial level	-6 and -8 dB [1])	20 – 60 mA
Sensitivity of tone dial	min. -40 dB	20 – 60 mA
Sensitivity of tones detector	min. -30 dB	20 – 60 mA
Powering of backlight, relays and heating	12Vss ± 2V , 10-12Vst ± 2V	
Max consumption of backlight and heating	250mA	12Vss
Max voltage of relay contact	48V	when I < 1A
Max current of relay contact	1,5A	when U < 30 V
Operation temperature	- 20 to + 60 st	
IP rate	IP44	
Weight	max. 350g	
Camera	Parametres on page 18	

[1]) - possible setting by progam

6.2 Mechanical dimensions

Model	dimension HxWxD [mm]
Brave Smyle (1 and 2 buttons)	185 x 99 x 40
Weather hood	68 x 103 x 60
Brave with weather hood	187 x 103 x 60
Screw 2x	screw 3.5x30 halfround head
Wall plug 2x	UPA,UPP pr. 5 x 25

7 Table for easy programming

Into empty parts of table write values which you desire to programm. In double linked part are mentioned programming commands for easy programming. Moreover the programmed values stay in manual for future changes.

Description		Programming sequence		digits
description	detail	par.	Fill up your values	
Number under button **1**	Day/1gr.	**101**		24
Number under button **2**	Day/1gr.	**102**		24
Number under button **3**	Day/1gr.	**103**		24
Number under button **4**	Day/1gr.	**104**		24
Number under button **5**	Day/1gr.	**105**		24
Number under button **6**	Day/1gr.	**106**		24
Number under button **7**	Day/1gr.	**107**		24
Number under button **8**	Day/1gr.	**108**		24
Number under button **9**	Day/1gr.	**109**		24
Number under button **10**	Day/1gr.	**110**		24
Number under button **11**	Day/1gr.	**111**		24
Number under button **12**	Day/1gr.	**112**		24
1 Number under button	Night/2gr	**201**		24
2 Number under button	Night/2gr	**202**		24
3 Number under button	Night/2gr	**203**		24
4 Number under button	Night/2gr	**204**		24
5 Number under button	Night/2gr	**205**		24
6 Number under button	Night/2gr	**206**		24
7 Number under button	Night/2gr	**207**		24
8 Number under button	Night/2gr	**208**		24
9 Number under button	Night/2gr	**209**		24
10 Number under button	Night/2gr	**210**		24
11 Number under button	Night/2gr	**211**		24
12 Number under button	Night/2gr	**212**		24
relay **1** works in mode	m=1 - 8	**311**		1
relay **2** works in mode	m=1 - 8	**312**		1
Password for relay **1** (1 pulse)	**Day+Night**	**3211**		6

password relay **1** (1pulse)	Day/Night	**3212**		6
password relay **1** (1pulse)	Day/Night	**3213**		6
password relay **1** (1pulse)	Day/Night	**3214**		6
password relay **1** (1pulse)	Day/Night	**3215**		6
password relay **1** (2pulses)	Day/Night	**321***		6
password relay 2 (1 pulse)	Day/Night	**3221**		6
password relay 2 (1 pulse)	Day/Night	**3222**		6
password relay 2 (1 pulse)	Day/Night	**3223**		6
password relay 2 (1 pulse)	Day/Night	**3224**		6
password relay 2 (1 pulse)	Day/Night	**3225**		6
password relay 2 (2 pulses)	Day/Night	**322***		6
Password relay **1** (1 pulse)	Day	**3311**		6
Password relay **1** (1 pulse)	Day	**3312**		6
Password relay **1** (1 pulse)	Day	**3313**		6
Password relay **1** (1 pulse)	Day	**3314**		6
Password relay **1** (1 pulse)	Day	**3315**		6
Password relay **1** (2 pulses)	Day	**331***		6
password relay 2 (1 pulse)	Day	**3321**		6
password relay 2 (1 pulse)	Day	**3322**		6
password relay 2 (1 pulse)	Day	**3323**		6
password relay 2 (1 pulse)	Day	**3324**		6
password relay 2 (1 pulse)	Day	**3325**		6
password relay 2 (2 pulses)	Day	**332***		6
Password relay **1** (1 pulse)	Night	**3211**		6
Password relay **1** (1 pulse)	Night	**3212**		6
Password relay **1** (1 pulse)	Night	**3213**		6
Password relay **1** (1 pulse)	Night	**3214**		6
Password relay **1** (1 pulse)	Night	**3215**		6
Password relay **1** (2 pulses)	Night	**321***		6
password relay 2 (1 pulse)	Night	**3221**		6
password relay 2 (1 pulse)	Night	**3222**		6
password relay 2 (1 pulse)	Night	**3223**		6
password relay 2 (1 pulse)	Night	**3224**		6
password relay 2 (1 pulse)	Night	**3225**		6
password relay 2 (2 pulses)	Night	**322***		6

Button selection for relay 1	m=6	**311***		2
Button selection for relay 1	m=6	**312***		2
Relay **1** activation by phone	1 pulse	**351**		2
Relay **2** activation by phone	1 pulse	**352**		2
Relay **1** activation by phone	2 pulses	**361**		2
Relay **2** activation by phone	2 pulses	**362**		2
Time of closing for relay **1**	[sec]	**371**		2
Time of closing for relay **2**	[sec]	**372**		2
Incoming call relay**1** control	1 / 0	**381**		1
Incoming call relay**2** control	1 / 0	**382**		1
Delay between closing relay **1** and **2**	[sec]	**39**		2
Time between pulses rel **1**	[sec]	**301**		2
Time between pulses rel **2**	[sec]	**302**		2
Enable code relay (COSW-sw.1)	0/1	**3#0**		1
code for activation 1 imp./btn.	0000-1111	**3#1**		4
code for activation 1 imp./phn.	0000-1111	**3#2**		4
code for activation 2 imp./btn.	0000-1111	**3#3**		4
code for activation 2 imp./phn.	0000-1111	**3#4**		4
code for activation other mode	0000-1111	**3#5**		4
Dial type tone / pulse	0 / 1	**41**		1
Call prolongation character	* / #	**42**		1
Brave hanging up by phone	1.	**431**		2
Brave hanging up by phone	2.	**432**		2
Service password		**44**		4
Code to switch into **DAY**		**45**		2
Code to switch into **NIGHT**		**46**		2
Door intercom dial mode	1 / 0	**47**		1
Hang up by same button p.	0 / 1	**4***		1
Number of rings for pick up		**51**		1
Maximal call duration	[min]	**52**		1
Time between button press	[sec]	**53**		1
Hang up time - REDIAL	[sec]	**54**		1
Time before dial start	[sec]	**55**		1
Numb of rings bef. Hang up		**56**		2
Tone detector frequency	table	**500**	ms	1

Number of busy tones		**501**		1
Time duration of permanent tone		**502**	sec	2
Time duration of tone dial	nn x 10	**503**	ms	2
Space betweeni DTMF tones	nn x 10	**504**	ms	2
Flash duration	n x 100	**505**	ms	1
pause/ space between numbers	n x100+400	**506**	ms	1
DTMF transmission level	04-16	**507**	-dBm	2
preemphase DTMF	0 / 1	**508**		1
Listening in DTMF - level	1-4	**509**		1
Acustic signalling	0 / 1	**61**		1
Acustic signalling Off hook /on hook	0 / 1	**62**		1
Acustic signalling beeps	0 / 1	**63**		1
External power supply 12V	0 / 1	**64**		1
Acustic signalling of relay activation	0 / 1	**65**		1
Depression of DTMF reception from microphone	0 /1	**66**		1
BabyCall	0 / 1	**67**		1
Number of buttons on panel	Up model	**6#**		1
Delayed start (Siemens)		**6***		1
Reception loudness (TRH)	01-16	**71**		2
Transmission loudness (MIC)	01-16	**72**		2
Speaker loudness (SPK)	01-16	**73**		2
Soft pass of switching	0 / 1	**74**		1
Depression of background sound	0 / 1	**75**		1
Level of microphone start	1 - 4	**76**		1
Fast switching voice automatic	1 - 4	**77**		1
VA charakteristic	0 / 1	**78**		1
Compemsation of wires losses	0 / 1 / 2	**79**		1
Signalling transmission level	04 - 16	**70**	-dBm	2
on/off.automatic switching	0 / 1 / #	**09**		0
Time setting	hhnn	**081**		4

Date setting+weekday *w*	ddmmyyw	**082**		7
sunday	hhnnkkjj	**00**		8
Monday	hhnnkkjj	**01**		8
Tuesday	hhnnkkjj	**02**		8
Wednesday	hhnnkkjj	**03**		8
thursday	hhnnkkjj	**04**		8
friday	hhnnkkjj	**05**		8
saturday	hhnnkkjj	**06**		8

BRAVE – user guide

Producer:

Distributor:

Sales date:

∧LPH∧
Tech